Application of
Palmetto Energy Center, LLC
for a Certificate of Environmental Compatibility and Public Convenience and Necessity to Construct a Major Utility Facility

Docket No. 2001-507-E

Testimony of
A. R. Watts
Utilities Department

Public Service Commission of South Carolina

TESTIMONY OF A.R. WATTS

FOR

THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKET NO. 2001-507-E

IN RE: Application of Palmetto Energy Center, LLC for a Certificate of Environmental Compatibility and Public Convenience and Necessity to Construct a Major Utility Facility

Q WOULD YOU PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION?

A A.R. Watts, 101 Executive Center Drive, Columbia, South Carolina. I am employed by the Public Service Commission of South Carolina, Utilities Department, as Chief of Electric.

Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A I received a Bachelor of Science Degree in Electrical Engineering from the University of South Carolina in Columbia in 1976. I was employed at that time by this Commission as a Utilities Engineer in the Electric Department and was promoted to Chief of the Electric Department in August 1981. I have been in my current position since October 1999. I have testified before this Commission in conjunction with fuel clause, complaint, territorial assignment, Siting Act, and general rate proceedings.

Q WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A The purpose of my testimony is to respond to Commission Order 2002-26, which directed Staff to file testimony containing exhibits of the most recent Integrated Resource Plan for each electric utility in the Southeastern Electric Reliability Council (SERC) states. In addition, the Order directed Staff to prefile testimony containing information on the number, generation type (i.e., combined cycle, coal-fired), and capacity of all approved, certified, or permitted merchant plants located in all the SERC states except South Carolina.

Q PLEASE EXPLAIN STAFF EXHIBIT A.

A Staff Exhibit A is a compilation of data from the SERC region which provides information pertaining to merchant plants located in the individual states. The thirteen states that are included in the SERC region, either in whole or in part are: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, South Carolina, Tennessee, Texas, and Virginia. The SERC control area encompasses only a small portion of the states of Florida and Texas, and both of these states have individual control, or system grid, areas. Due to the insignificant amount of the SERC region in the State of Texas, merchant plant statistics for that State were of no consequence and therefore not included in Exhibit A. Also, certification in the State of Florida requires the output of a steam plant to be committed to an incumbent electrical utility, thereby almost certainly minimizing, if not eliminating, the possibility of merchant facilities locating in that State. Likewise, no statistics from the State of Florida are included in Exhibit A.

One of the challenges in gathering this information is the fact that there have been many merchant plant facilities that have been announced and proposed for the SERC

region, but not all will be certificated or constructed. Staff attempted to include only those merchant plant facilities that have received some type of approval, and where that information was not available, we accepted those that were under construction or that had an in-service date no later than the calendar year 2003. With these unknowns it is difficult to predict when, and in some cases, *if*, these facilities will become operational. In addition, each state in the SERC region has varying degrees of Siting and Regulation of not only merchant facilities, but also restructuring of retail electric service. Numerous state Commissions have *no* certification requirements for merchant plants, a fact which adds another obstacle to obtaining accurate data of not only the plant names but also the size and type of generating facilities.

The information provided on Exhibit A indicates that natural gas is the fuel of choice for these merchant facilities with a mixture of combined-cycle and simple-cycle configuration; however there are several coal-fired facilities, the majority of which are located in Kentucky. Mississippi has the highest capacity of merchant facilities with a total 9965 megawatts (MW) as shown on Exhibit A. This is followed by Arkansas with a total of 7970 MW, all of which is natural gas-fired and combined-cycle. The third highest capacity totals 7073 MW from plants in Louisiana which are all fueled by natural gas. Alabama is next with 6453 MW, all of which utilize natural gas as the fuel, and likewise Georgia is all gas fired and totals 5248 MW. Kentucky follows with 5026 MW of which 3986 MW is natural gas-fired and simple cycle; the remainder is coal fueled, base load generation. North Carolina is seventh at 4180 MW, followed by Tennessee with 3555 MW of merchant plant generation. Missouri has one natural gas-fired, simple-cycle facility consisting of 640 MW. Even though there have been approximately thirty announced or proposed merchant facilities in Virginia, we were

only able to confirm 421 MW of certificated non-incumbent generation. Virginia began the process of open access to generation for the retail class effective January 1, 2002, which means that generation of electric energy is no longer regulated and power from new plants will be available for sale into the competitive market. The total capacity of all these plants from these ten states amounts to 50,531 MW, but as I stated previously, there is no certainty that all these facilities will come to fruition.

Q PLEASE DESCRIBE THE RESULTS OF YOUR EFFORTS TO SECURE THE MOST RECENT INTEGRATED RESOURCE PLANS FOR EACH ELECTRIC UTILITY IN THE SERC REGION STATES?

A In attempting to obtain copies of the IRPs of the electrical utilities in the SERC region, we found that the only state Commissions, other than South Carolina, that require these Plans to be filed are Alabama, Georgia, and North Carolina. In addition to the exclusion of Florida and Texas for the above referenced insignificance in the SERC region, the states of Kentucky and Missouri indicated that none of the regulated utilities in those states are members of SERC.

As directed by the Commission's Order, I have included the IRPs that we were able to secure in Staff Exhibit B.

Q WOULD YOU PLEASE DESCRIBE THE IRPS THAT YOU HAVE INCLUDED IN STAFF EXHIBIT B?

A Yes. Included in Exhibit B from the three states of Alabama, Georgia, and North Carolina are IRPs from Alabama Power Company, Georgia Power Company, Savannah Electric and Power Company, and Dominion North Carolina Power. In addition, I have included three pages of information from Virginia for Virginia Electric and Power Company for peak load and energy forecast and generation data, which is

filed with the State regulatory agency. The Plans for Georgia Power and Savannah Electric have significant amounts of redacted portions which I have not included in this Exhibit. Redacted information includes charts showing the projected load forecasts and the sources of supply to meet these expected demands. Even with the material that is available, very little useful information can be extracted as it pertains to demand requirements for the SERC region. In addition, SERC confirmed that they do not receive and do not have on file the IRPs of the electric member utilities. SERC also stated that they likewise do not have data on merchant plant facilities in the region.

Q DID STAFF SERVE A DATA REQUEST ON THE APPLICANT, PALMETTO ENERGY CENTER?

A Yes. In an effort to have certain information for the record which the Commission indicated in its Order No. 2002-19 issued in Docket No. 2001-420-E, was desirable and a required component of all future siting applications, a Data Request was issued. The Data Request sought 1) a summary of the alternative sites along with the economic and engineering justification for the actual site selected; and 2) the transmission interconnection study on the transmission impacts of the proposed facility.

Q DID THE COMPANY RESPOND TO THE DATA REQUEST?

A Yes. The Company provided a set of seven criteria used in potential site evaluations. In addition, the response indicated that the search process produced several potential sites, and it went on to provide in general terms the reasons for the elimination of the other sites and the rational for the selection of the chosen location.

In response to the request for the transmission interconnection study, the Company provided a copy of a letter dated December 12, 2001 from Christopher M. Fallon of

Duke Energy to Charlotte Glassman. This two page correspondence is not the actual study, but consists of a cover page with general comments and a reference to the attached as containing the results of the Generation Interconnection Study. The attachment is one page in length, is titled "DISCUSSION OF DUKE ENERGY'S GENERATION INTERCONNECTION STUDY RESULTS FOR CALPINE'S YORK COUNTY, SC (863 MW SUMMER/954 MW WINTER) SITE IN 2004 – REPORT DATE: DECEMBER 12, 2001", and describes the study methodology and the thermal study results.

I have included the Company's response to the Staff Data Request as Staff Exhibit C.

Q DOES THIS CONCLUDE YOUR TESTIMONY?

A Yes, it does.